Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application. For examiner's convenience, a clean version of claim 25 is reproduced on a separate page following the listing of claims.

Listing of claims:

- 1.-24. (canceled)
- 25. (currently amended) A method for qualitative or quantitative detection of a nucleic acid in a sample, said method comprising the steps of:

amplifying a <u>test</u> nucleic acid to be detected in a sample in the presence of at least one single-stranded detection probe that by a reversible binding action reversibly binds reversibly to a binding region of said <u>test</u> nucleic acid to be detected and enables [[a]] detection of said <u>test</u> nucleic acid to be detected based on said reversible binding action;

adding a single-stranded control nucleic acid to said sample and amplifying said added -single stranded control nucleic acid in said-sample, wherein said -single stranded control nucleic acid has a binding region that also binds said at least one single stranded detection probe and wherein said binding region of said added single stranded control nucleic acid has a nucleotide sequence having at least one deviation in comparison to said nucleotide sequence of said binding region of said test nucleic acid to be detected; and

said control nucleic acid consists essentially of the sequences necessary for amplification and for binding of said probe and no more than about 10% of additional nucleotides; and

wherein a first product of said test nucleic acid to be detected and of said at least one single stranded detection probe and a second product of said added single stranded control nucleic acid and of said at least one single stranded form hybrids with said detection probe have different having melting points and a temperature difference of said melting points is sufficiently large different to analytically differentiate said hybrids first and second products from one another for carrying out said detection, wherein said detection is carried out at a temperature that is 2 °C to 10 °C below said the melting temperature point of said first product detection probe.

- 26. (previously presented) The method according to claim 25, wherein said melting point of said second product control nucleic acid hybrid is lower than said melting point of said first product hybrid of said test nucleic acid.
- 27. (previously presented) The method according to claim 25, wherein said temperature melting point difference is at least 5 °C.
- 28. (currently amended) The method according to claim 25, wherein said added single-

Atty Docket: 24175-US Serial No. 10/562,441 Response to Final Action Page 3 of 7

stranded control nucleic acid and said test nucleic acid to be detected are amplified with identical primers.

- 29. (currently amended) The method according to claim 25, wherein said <u>test</u> nucleic acid to be detected and said added single stranded control nucleic acid are amplified by polymerase chain reaction.
- 30. (currently amended) The method according to claim 25, wherein two or more of said test nucleic acid acids to be detected and two or more of said added single stranded control nucleic acid acids are present in said the same sample. and wherein for each one of said nucleic acids to be detected one of said added single stranded control nucleic acids is present.
- 31. (currently amended) The method according to claim 25, wherein said <u>test</u> nucleic acid to be detected is a DNA or an RNA derived in particular <u>derived</u> from a pathogen.
- 32. (currently amended) The method according to claim 25, wherein said detection of said nucleic acid to be detected is carried out in real-time.
- 33. (previously canceled)
- 34. (previously presented) The method according to claim 25, wherein said melting point of said second product control nucleic acid hybrid is so low that said second product hybrid is negligible or not at all present in said detection.
- 35. (currently amended) The method according to claim 25, wherein only one of said at least one single stranded detection probe probes is used and said detection of said nucleic acid to be detected is based on a melting curve of said test nucleic acid to be detected in the presence of said at least one single-stranded detection probe, wherein [[a]] the melting curve of said added single stranded control nucleic acid in the presence of said at least one single-stranded detection probe serves as an internal control of proper amplification.
- 36. (currently amended) The method according to claim 25, wherein two of said-at least one single-stranded detection probe probes are used, said probes forming a FRET pair. wherein a first one of said two single-stranded detection probes carries a reporter group and a second one of said two single-stranded detection probes changes observable properties of said reporter group when in a position in the vicinity of said reporter group. 37-38. (cancelled)
- 39. (previously presented) The method according to claim 38 25, wherein said at least one modification deviation in nucleotide sequence is an exchange of an A or a T for a G or a C.

40-44. (cancelled)

45-47. (withdrawn)

Clean version of claim 25

25. (currently amended) A method for qualitative or quantitative detection of a nucleic acid in a sample, said method comprising the steps of:

amplifying a test nucleic acid in a sample in the presence of at least one singlestranded detection probe that reversibly binds to a binding region of said test nucleic acid and enables detection of said test nucleic acid;

adding a single-stranded control nucleic acid to said sample and amplifying said control nucleic acid, wherein said control nucleic acid has a binding region that also binds said detection probe and has a nucleotide sequence having at least one deviation in comparison to said binding region of said test nucleic acid; and

said control nucleic acid consists essentially of the sequences necessary for amplification and binding of said probe and no more than about 10% additional nucleotides; and

wherein said test nucleic acid and said control nucleic acid form hybrids with said detection probe having melting points sufficiently different to analytically differentiate said hybrids, wherein said detection is carried out at a temperature that is 2°C to 10 °C below the melting point of said detection probe.